

**LB3000/LB3000PS
Lock Box**

**Installation/
Operation Manual**

C1907M (8/00)

IMPORTANT SAFEGUARDS AND WARNINGS

Prior to installation and use of this product, the following WARNINGS should be observed.

1. Installation and servicing should only be done by qualified service personnel and conform to all local codes.
2. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6 or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.
3. The installation method and materials should be capable of supporting four times the weight of the unit and equipment.
4. Only use replacement parts recommended by Pelco.
5. After replacement/repair of this unit's electrical components, conduct a resistance measurement between line and exposed parts to verify the exposed parts have not been connected to line circuitry.
6. If the unit has fuses, replace fuses only with the same type fuses for continued protection against risk of fire.

The product and/or manual may bear the following marks:



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

CAUTION:
RISK OF ELECTRIC SHOCK. DO NOT OPEN.

Please thoroughly familiarize yourself with the information in this manual prior to installation and operation.

DESCRIPTION

The LB3000/LB3000PS Lock Box fastens to a wall to provide a secure enclosure for CCTV equipment (refer to Figure 1). The LB3000PS includes a 24 VAC power supply that can power up to 16 cameras (12 vA maximum per camera).

Two locking latches on the front door prevent unauthorized entry.

A monitor can be placed on top of the lock box.

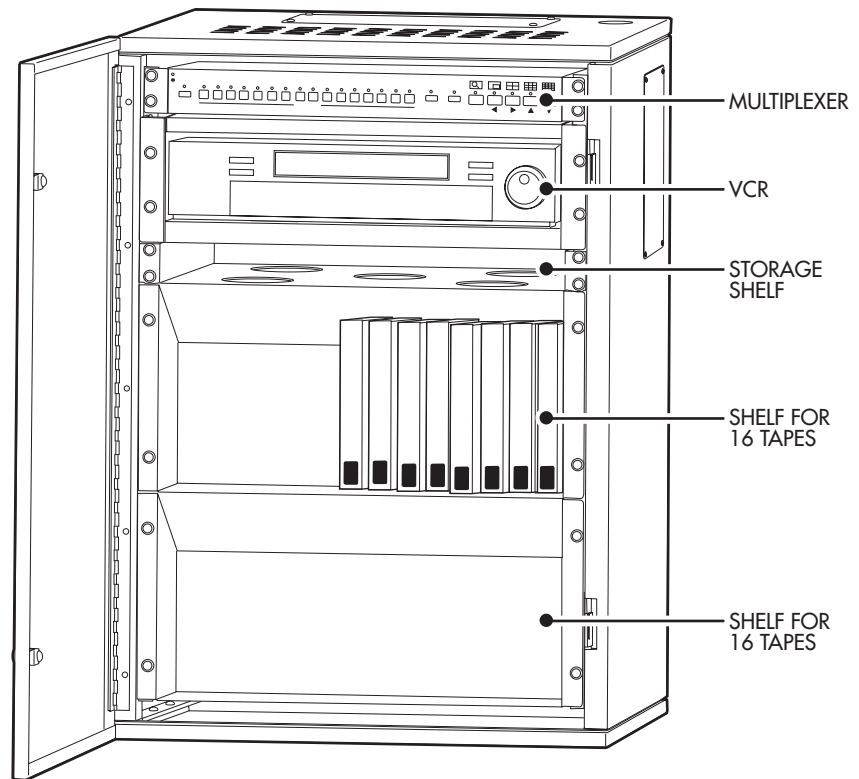


Figure 1. LB3000/LB3000PS Lock Box

INSTALLATION

1. Open the front door of the lock box.
2. Remove the bottom tape shelf.
3. Reach inside the lock box and remove the two nuts from the mounting studs on the bottom of the rear mounting plate (refer to Figure 2).
4. Remove the mounting plate: pull out a few inches on the bottom of the plate and then pull downward to release the mounting tabs at the top of the plate.
5. Place the mounting plate against the wall and mark the eight holes for attaching the lock box to the wall. The mounting holes on each side of the plate are spaced 16 inches apart so the plate can be fastened to standard wall studs. Also outline the cable entry opening. Refer to Figure 2.
6. Drill pilot holes for 3/8-inch diameter wood screws.
7. Cut out the opening for cable access. Provide 120 or 240 VAC power receptacles for the following:
 - VCR
 - multiplexer
 - monitor, if it is going to be placed on top of the lock box
 - MCS16-10 Master Power Supply (LB3000PS only)
8. Fasten the mounting plate to the wall studs with 3/8-inch diameter wood screws.
9. LB3000PS Only – Install the MCS16-10 Master Power Supply. Refer to the *Power Supply Installation* section.
10. Bring all video cables for the cameras through the opening in the wall. Refer to Table A in the Appendix for the type of video coaxial cable to use.

It is not necessary to bring any wiring through the wall for the VCR or a monitor placed on top of the lock box.

If you are going to wire other remote equipment (monitors, alarms, or keyboard) to the multiplexer, refer to the multiplexer and keyboard manuals for wiring requirements.

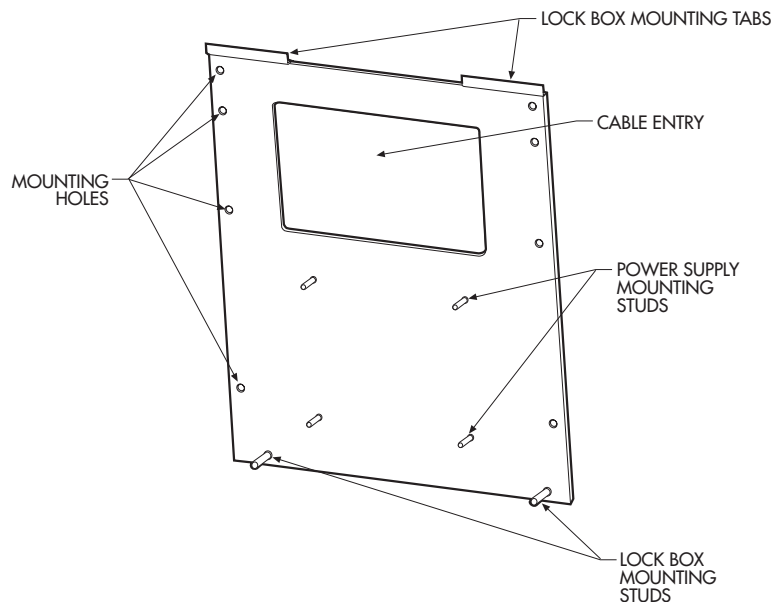


Figure 2. Mounting Plate

11. Fasten the lock box to the mounting plate (refer to Figure 2). Place the top, back side of the lock box over the mounting tabs on the top of the mounting plate. Open the lock box door and make sure the mounting studs in the bottom of the mounting plate go through the stud holes in the bottom of the lock box. Replace the nuts removed in step 3.
12. Replace the bottom tape shelf removed in step 2.
13. Install the VCR and multiplexer. Refer to the manuals supplied with the equipment. Unscrew and remove the access panels in the top and sides of the lock box to reach the back of the equipment to make wiring/cabling connections.
14. (Optional) Place a monitor on top of the lock box. Connect a video cable to the monitor. Drop the video cable and power cord from the monitor through the round hole in the top of the lock box. Connect the video cable to the multiplexer and the power cord to a power outlet.
15. Turn on all equipment and program the VCR and multiplexer according to the manuals supplied with the equipment.
16. Turn on all equipment and program the VCR and multiplexer according to the manuals supplied with the equipment.

POWER SUPPLY INSTALLATION



WARNING: Pelco shall not be liable for any damages resulting from incorrect wiring or improper loading of the MCS16-10 Master Power Supply.



CAUTION: Under light load conditions and high power line input voltage from the utility company, output voltage from the power supply (28 VAC taps only) could exceed 32 VAC. This voltage can cause over-voltage damage on 24 VAC devices. Keep in mind, certain devices produce variable loads (due to heaters, blowers, and pan and tilt motion) and during minimum requirements may create a light load condition, causing excessive voltage. Therefore, Pelco recommends using a 28 VAC tap only when the supplied wire size for the given load causes an unacceptable output voltage on the 24 VAC tap. Refer to Table D in the Appendix to determine acceptable situations for the 28 VAC tap.

LB3000PS Model Only

1. Fasten the power supply to the mounting plate with the supplied lock washers and nuts (refer to Figure 2).
2. Verify that the on/off switch is OFF.
3. Remove the high-voltage compartment panel (refer to Figure 3). Set the input voltage selector switch to the appropriate line voltage.
4. Remove the spare fuse bag from the high-voltage compartment. The power supply is shipped with a fuse installed for 120 VAC operation. If you are going to use 240 VAC, remove the 3-ampere fuse from the fuse holder and replace it with a 1.6-ampere fuse from the fuse bag.
5. Replace the high-voltage compartment panel.
6. Refer to Table B in the Appendix for the number of cameras the power supply can power. Refer to Tables C and D in the Appendix to determine the size of wire required to power the cameras.
7. Install and connect power wires from the cameras to the power supply. For each camera, attach one wire to the COM terminal and the other wire to either the 24V or 28V terminal (refer to Figure 3). Double-check the installation for safety purposes.
8. Plug in the power cord and turn on the power supply. Use a voltmeter to verify that the used outputs are at the appropriate voltage levels.
9. Return to step 10 of the *Installation* section to complete the installation.

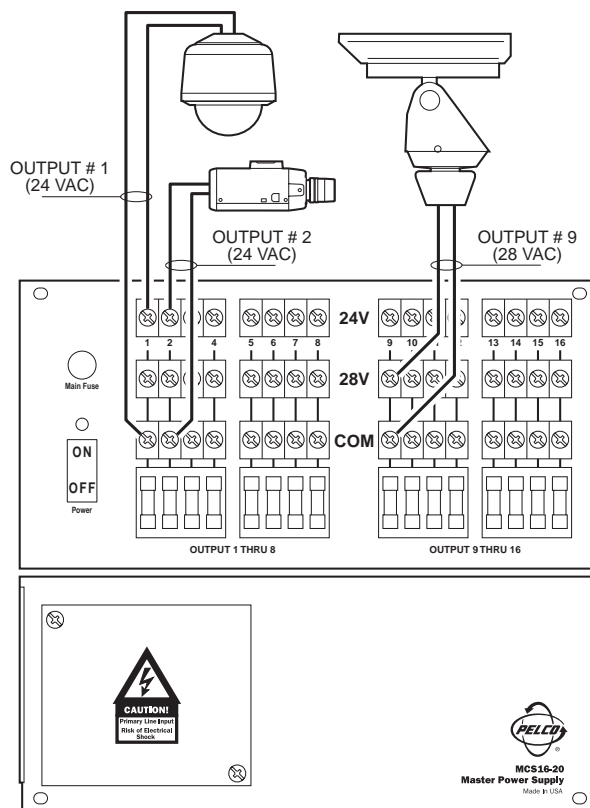


Figure 3. Power Supply Wiring Diagram

APPENDIX

Table A. Video Coaxial Cable Requirements

Cable Type*	Maximum Distance
RG59/U	750 ft (229 m)
RG6/U	1,000 ft (305 m)
RG11/U	1,500 ft (457 m)

* Minimum cable requirements:
 75 ohms impedance
 All-copper center conductor
 All-copper braided shield with 95% braid coverage

Table B. Power Supply Product Capacity

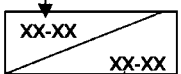
Product	MCS16-10
CCD Camera (12 vA maximum)	16
DF5/DF5S with camera (3 vA)	16
DF8A/PDF8 (12 vA maximum)	16
Indoor Spectra® (30 vA)	8
Esprit™ (50 vA)	4

Table C. Recommended Wiring Distances for Power Supply

The following are the recommended maximum distances (transformer to load) and are calculated with a 10-percent voltage drop. (Ten percent is generally the maximum allowable voltage drop for AC-powered devices.)

Input Voltage	Total vA Consumed	Wire Gauge			
		20	18	16	
24 VAC	10	283 ft (86 m)	451 ft (137 m)	716 ft (218 m)	
	20	141 ft (42 m)	225 ft (68 m)	358 ft (109 m)	
	30	94 ft (28 m)	150 ft (45 m)	238 ft (72 m)	
	50	56 ft (17 m)	90 ft (27 m)	143 ft (43 m)	
28 VAC	10	386 ft (117 m)	614 ft (187 m)	975 ft (297 m)	
	20	193 ft (58 m)	307 ft (93 m)	487 ft (148 m)	
	30	128 ft (39 m)	204 ft (62 m)	325 ft (99 m)	
	50	77 ft (23 m)	122 ft (37 m)	195 ft (59 m)	

Table D. Required Wire Gauge for Power Supply

Required Wire Gauge Table (AWG)												
WIRE DIST (feet) ↓	CCD Camera	P/T480 Pan/Tilt	Indoor Spectra	PT570 Pan/Tilt	Esprit Pan/Tilt	Indoor XLS	CX9000 Rkr's	Outdoor Spectra	Equipment Loads (VA)			
	10VA	20VA	30VA	40VA	50VA	60VA	70VA	80VA	90VA	100VA	200VA	
1000	12-14 16-18	12 12-14	N/A 12-14	N/A 12	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A
900	12-14 16-18	12 14-16	12 12-14	N/A 12	N/A 12	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A
800	12-14 16-18	12 14-16	12 12-14	N/A 12	N/A 12	N/A 12	N/A 12	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A
700	12-16 18-20	12 14-16	12 12-14	12 12-14	N/A 12	N/A 12	N/A 12	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A
600	12-16 18-20	12 14-18	12 14-16	12 12-14	N/A 12-14	N/A 12	N/A 12	N/A 12	N/A 12	N/A N/A	N/A N/A	N/A
500	12-16 18-20	12-14 16-18	12 14-16	12 12-14	12 12-14	N/A 12-14	N/A 12	N/A 12	N/A 12	N/A N/A	N/A N/A	N/A
400	12-18 20-22	12-14 16-18	12 14-18	12 14-16	12 12-14	12 12-14	12 12-14	N/A 12	N/A 12	N/A 12	N/A 12	N/A
300	12-18 20-22	12-16 18-20	12-14 16-18	12 14-18	12 14-16	12 14-16	12 12-14	12 12-14	12 12-14	N/A 12-14	N/A 12-14	N/A
200	12-20 22	12-18 20-22	12-16 18-20	12-14 16-18	12-14 16-18	12 14-16	12 14-16	12 14-16	12 14-16	12 12-14	N/A 12-14	12-14
100	12-22 N/A	12-20 22	12-18 20-22	12-18 20-22	12-16 18-20	12-16 18-20	12-16 18-20	12-14 16-18	12-14 16-18	12-14 16-18	12 16-18	12-14
<p>American Wire Gauge (AWG) Using 24 Volt Tap</p>  <p>American Wire Gauge (AWG) Using 28 Volt Tap</p> <p>N/A - Distance and Load <u>Not</u> Recommended For Any Wire Size Between 12-22 (AWG)</p>												

SPECIFICATIONS

LOCK BOX

Construction

Cabinet:	Aluminum
Mounting Plate:	Steel
Mounting Plate Support:	Steel
Finish:	Charcoal gray polyester powder coat
Environment:	Indoor
Dimensions:	29.0 (H) x 21.0 (W) x 19.0 (D) inches (73.7 x 53.3 x 48.3 cm)
Weight	
LB3000:	
LB3000PS:	

MCS16-10 POWER SUPPLY (LB3000PS ONLY)

Input Voltage:	120 or 240 VAC, 50/60 Hz
Output Voltage:	24/28 VAC
Outputs:	16
Supply Current:	10 A
Max. Current per Channel:	3 A
Required Input Current	
120 VAC:	2.20 A
240 VAC:	1.15 A
Surge Protection:	Yes
Output Fuse Rating:	3 A
Output Connectors:	Screw-type barrier strips
Output Wire Size:	12-22 gauge, solid or stranded wire
Construction:	Steel

(Design and product specifications subject to change without notice.)

PRODUCT WARRANTY AND RETURN INFORMATION

WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship **for a period of one year** after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years on FT/FR8000 Series fiber optic products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on Camclosure® and fixed camera models, except the CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models, which have a five-year warranty.
- Two years on standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra®, Esprit®, ExSite™, and PS20 scanners, including when used in continuous motion applications.
- Two years on Esprit® and WW5700 Series window wiper (excluding wiper blades).
- Eighteen months on DX Series digital video recorders, NVR300 Series network video recorders, and Endura™ Series distributed network-based video products.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, preset scan, tour and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair).

All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid. Ship to the appropriate address below.

If you are located within the continental U.S., Alaska, Hawaii or Puerto Rico, send goods to:

Service Department
Pelco
3500 Pelco Way
Clovis, CA 93612-5699

If you are located outside the continental U.S., Alaska, Hawaii or Puerto Rico and are instructed to return goods to the USA, you may do one of the following:

If the goods are to be sent by a COURIER SERVICE, send the goods to:

Pelco
3500 Pelco Way
Clovis, CA 93612-5699 USA

If the goods are to be sent by a FREIGHT FORWARDER, send the goods to:

Pelco c/o Expeditors
473 Eccles Avenue
South San Francisco, CA 94080 USA
Phone: 650-737-1700
Fax: 650-737-0933

REVISION HISTORY

Manual #	Date	Comments
C1907M	7/00	Original version.